



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,170	04/05/2001	Gijsbertus Franciscus Maria Verheijden	O/98393US	3960

7590 05/19/2003

William M Blackstone  
Patent Department  
Intervet Inc  
405 State Street  
Millsboro, DE 19966

EXAMINER

NOLAN, PATRICK J

ART UNIT

PAPER NUMBER

1644

DATE MAILED: 05/19/2003

20

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. 09/744,170	Applicant(s) Verheyden et al.
Examiner Patrick J. Nolan	Art Unit 1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on Mar 7, 2003

2a)  This action is FINAL. 2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

4)  Claim(s) 1-4 and 6-12 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-4 and 6-11 is/are rejected.

7)  Claim(s) 12 is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1)  Notice of References Cited (PTO-892)

4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

5)  Notice of Informal Patent Application (PTO-152)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). 10

6)  Other: \_\_\_\_\_

**Part III DETAILED ACTION**

1. This application is a 35 USC 371 of Pct/EP95/05050. Applicant is required to update the first page of the specification to reflect Applicant's continuity and foreign priority.

2. Claims 1-4, 6-12 are pending. The Examiner has removed the restriction requirement, all currently filed claims will be examined.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. The claimed invention is directed to non-statutory subject matter. The currently pending claims read upon the full length protein and since the claims are not drawn to an isolated and purified, they read upon a product of nature.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 9 and 10 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for inducing tolerance intra-nasally in rheumatoid arthritis patients, does not reasonably provide enablement for inducing tolerance in any autoimmune patient when said peptide is administered by any route. The specification does not enable any person skilled in the art to which it pertains, or with which it is most clearly connected, to use the invention commensurate in scope with these claims.

It is well known in the art that there is no single unifying autoantigen from which all autoimmune diseases make an inappropriate response, see the Merck Manual of Diagnostics and therapy, 17th Edition, pages 1061-1063, in particular. Since Applicant has demonstrated that YKL-39 is an autoantigen in rheumatoid arthritis and it is art recognized that each autoimmune disease has its own specific autoantigens, it would be unpredictable for one of skill in the art to practice using YKL-39

peptides for treating all autoimmune diseases. Furthermore, Wendling et al., teaches that route of administration, nasal worked while parenteral did not, appears to be critical in treating autoimmune diseases with normally autoreactive peptides. Wendling et al., reasons that the stimulation of IL-10 production for bystander suppression appears to be critical for tolerance induction. It is recently known that nasal administration favors IL-10 production while other routes (parenteral) do not. However, such a fine tuning of administration is not recited by the instant claims, but appears critical to the enablement of the claimed invention. The practicing the full scope of the claimed invention would require an undue amount of experimentation for one of skill in the art to practice.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 6, 8 and 11 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hu et al. (R).

Hu et al., teaches the full length YKL-39 protein, in a pharmaceutical composition and with a detection agent, (see Materials and Methods, in particular). Applicant is notified the claim recitation having is considered open. If Applicant wishes to remove the prior art reference the use of consisting of language would suffice.

The prior art teachings anticipate the claimed invention.

7. Applicant is notified that claim 12 is objected as being dependent upon a rejected claim.

8. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicants cooperation is requested in correcting any errors of which applicant may become aware of in the specification.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Nolan whose telephone number is (703) 305-1987. The examiner can normally be reached on Monday through Thursday from 9:30 am to 4:30 pm.

Serial Number: 09/744,170  
Art Unit: 1644

4

10. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Christina Chan, can be reached at (703) 305-3973. The FAX number for our group, 1644, is (703) 305-7939. Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the Group receptionist, whose telephone number is (703) 308-0196.

*Pat J. Nolan*

Patrick J. Nolan, Ph.D.  
Primary Examiner, Group 1640  
May 18, 2003